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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/822,072

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Shinichi Hasegawa

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01/14/2009

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EXAMINER

TO, TUAN C

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/822,072	<b>Applicant(s)</b> HASEGAWA ET AL.	
	<b>Examiner</b> TUAN C. TO	<b>Art Unit</b> 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 12-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 12-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 12, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carroll et al. (US 20030097211A1) and in view of Lightner et al. (US 6636790B1).

As to claims 1 and 14, as set forth in paragraph 0027, Carroll et al. discloses the remote service provider (150) that maintains a user database (154) and a service database (152) which stores various types of data such as service data for various automotive services and vehicle models (paragraph 0027, lines 10 and 11), software applications, specifications, parameter, user's manual, and other data related to vehicle diagnoses. In paragraph 0036, Carroll et al. teaches that a user can submit a request to access a web page from the remote service provider (150). The web pages contain user information for the user to retrieve data stored in service database (152) into user database (154). At this point, it is clear that the database (154) stores the vehicle model information downloaded from the service database (152). In addition, the user interface disclosed shown in figure 3b including a layout of screen, thus the storage device (21) as seen in figure 2 comprises information necessary for layout screen as seen in figures 3b-3d.

Carroll et al. further teaches the computer system (200) for recognizing vehicle model based on the input signal from the user interface (Carroll et al., figure 2, page 3, paragraph 0037).

Carroll et al. further teaches the function setting means (32) (Carroll et al. figure 3b and figure 3c) that are used to set the design information related to function or operation of the vehicle (Carroll et al., figure 3d, including a list of design data-manufacturer, year, model has been set).

Carroll et al. further teaches a display device for displaying function design of the vehicle set by said buttons (Carroll et al., figure 2, display 212).

Art Unit: 3663

Carroll et al. merely fails to disclose "getting means for automatically getting vehicle model information from the vehicle by determining a shape of a connector used to attach onboard apparatus to the vehicle, the vehicle model information being peculiar to the vehicle".

Carroll et al. merely fails to disclose "getting means for automatically getting vehicle model information from the vehicle by determining a shape of a connector used to attach the onboard apparatus to the vehicle" or "getting vehicle model information from the vehicle by determining a formed position of a connector used to attach the onboard apparatus to the vehicle".

Lightner et al. teaches a connector (120) used to attach a data collector/router (35) to the vehicle's OBD/ECU system (100), wherein said connector (120) has a serial, 16-cavity layout, with specific electrical connections in separate cavities supplying data and electrical power from the OBD/ECU system (100). The data collector/router (35) comprises a processor (104) that gets vehicle model information from the vehicle's OBD/ECU system (100) when the connector (120) electrically and mechanically matches the OBD-II interface (102) in the data collector/router (35) (see column 6, lines 26-35, and lines 53-67 through column 7, lines 1-7). Lightner et al. explained in said columns that the data transmitted through the connector (120) may have a format and pass through cavities that depend on the vehicle's make and model. For example, Ford and General Motors vehicle use an OBD data format called J1850; data in this format pass through cavities 2 and 10. Chrysler and most European and Asian manufacturers use a data format called ISO 9141-2 and pass data through cavities 7 and 15, and in a

Art Unit: 3663

third format, called J2284, data is passed through cavities 6 and 14. According to this, Lightner teaches each vehicle model data is obtained based on the shape of each connector in view of their pass through cavities and their positions.

Hence, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system/method as taught by Carroll et al. to include the teaching as taught by Lightner et al. so that a vehicle can be remotely diagnosed from a control service center based on the received diagnostic data from the vehicle.

As to claims 12, and 16, Carroll et al. teaches that the layout screen in figures 3b and 3c includes selection box for user setting a specific data to model, year of the a vehicle, and therefore in order to that happen, the storage devices shown in figure 2 should store function setting information.

Claims 2 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carroll et al. (US 20030097211A1), Lightner et al. (US 6636790B1), and further in view of Kataghishi (US 20040210363A1).

Carrol et al. teaches an on-board apparatus mounted on a vehicle comprising: a getting means for getting vehicle model information. For example, in figure 3a, the user interface provides a list of vehicle' country (vehicle model information) for user to select.

Carrol et al. teaches the computer system (200) for recognizing vehicle model based on the input signal from the user interface (Carrol et al., figure 2, page 3, paragraph 0037).

Art Unit: 3663

Carrol et al. further teaches a function setting means which is button (32) (Carrol et al. figure 3b) and another button shown in figure 3c. All of said buttons are utilized to set the design information related to function or operation of the vehicle (Carrol et al., figure 3d, including a list of design data-manufacturer, year, model has been set). Carrol et al. further teaches a display device for displaying function design of the vehicle set by said buttons (Carrol et al., figure 2, display 212). Carrol et al. fails to teach storage means for storing the vehicle model information and related design information of function information.

Lightner et al. teaches a system/method for characterizing a vehicle's performance in which is data collector/router (35), which is contained a small, portable housing that plugs directly into the connector (120) (see figure 2; column 6, lines 56-59), wherein said connector (120) is a serial, 16-cavity layout (see column 6, lines 60-64). The collector/router (35) comprising a processor electrical contact with said connector (see figure 2) to acquire vehicle model information by determining a shape of said connector (see column 6, lines 26-35, and lines 60-67; column 7, lines 1-7).

The reference to Katagishi et al. provided to cure the missing features from Carrol et al. and Lightner et al. by teaching an on-board apparatus to be mounted on a vehicle (Katagishi et al, figure 1, onboard apparatus 3), wherein said on-board apparatus (3) comprises a storage device (34) that stores vehicle model information such as manufacturer ID, car ID, etc. (Katagishi et al., page 3, paragraph 0032, line 7).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the onboard apparatus as taught by Carroll et al. and

Art Unit: 3663

Lightner et al. to include the storage device that stores vehicle model information as taught by Katagishi et al. in order to retrieve download information related to a vehicle from a list of vehicle that have previously had vehicle repair services.

Claims 13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carroll et al. (US 20030097211A1), Lightner et al. (US 6636790B1), and further in view of Borgesson (US 20050203684A1).

Carroll et al. and Lightner et al. fail to include "function setting information comprises at least one of a navigation function, a mileage measuring function, and a night-vision function".

Borgesson teaches a vehicle control system and method including "function setting information comprises at least one of a navigation function, a mileage measuring function, and a night-vision function" (see paragraph 0080).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the teachings of Borgesson into the system of Carroll et al. and Lightner et al. so that the operator user can keep track on the mileage history of a selected vehicle via a screen.

### ***Response to Applicant's Arguments***

The applicant's remarks filed on 10/23/2008 includes the arguments that Carroll and Lightner fail to disclose at least the claimed getting means of either claim 1: "getting means for automatically getting vehicle model information from the vehicle by determining a shape of a connector used to attach the onboard apparatus to the



Art Unit: 3663

vehicle”, or claim 14: “getting means for automatically getting vehicle model information from the vehicle by determining a formed position of a connector used to attach the onboard apparatus to the vehicle”. The applicant's further argued that Lightner discloses "a data collector/router 35 in electrical contact with a vehicle's OBD/ECU system 100. The two systems connect through a conventional OBD-II connector 120 typically located under the vehicle's dash board....connector 120 has a serial, 16 cavity-layout...the OBD-II connector 120 has a standard mechanical interface, data transmitted through it may have a format and pass through cavities that depend on the vehicle's make and model. For example, Ford and General Motors vehicles use an OBD data format called 11850; data in this format through cavities 2 and 10 of connector (120). And the applicant's concluded that Lightner discloses that a data format of data depends on a vehicle's model, Lightner fails to disclose, “getting vehicle model information from the vehicle by determining a shape of a connector used to attached the onboard apparatus to vehicle” as recited in claim 1 and also fails to disclose "getting vehicle model information from the vehicle by determining a formed position of a connector used to attach the onboard apparatus to the vehicle" as recited in claim 14.

In contrast, the examiner believed the relied on sections of Lightner (column 6, lines 26-35, and lines 53-67 through column 7, lines 1-7) includes the teachings of getting means for automatically getting vehicle model information from the vehicle". For example, Lightner teaches the data collector/router (35) as an onboard apparatus that comprises the data processor (104) coupled to the OBD-II interface (102), wherein the data collector/router (35) is in electrical contact with the vehicle's OBD/ECU system

Art Unit: 3663

(100) through the OBD-II connector (120). The shape of the connector (120) is defined by its format, and the vehicle's model information is obtained based on this format (see Lightner reference, column 6, lines 60-67 through column 7, lines 1-7). The OBD format called J1850, data in this format pass through cavities 2 and 10; the OBD format called ISO 9141-2, data in this format pass through cavities 7 and 15, and the OBD format called J2284, data in this format pass through cavities 6 and 14.

The data collector/router (35) having a processor (104) for automatically getting vehicle model information from the vehicle OBD's system by determining a formed position of the connector (120) used to attach the navigation system to the vehicle, where in the formed position of the connector is the position of each cavities defined by a number from the 16-cavity layout. For instance, the numbers 2 and 10 for the format J1850; the numbers 7 and 15 for the format ISO 9141-2; and the numbers 6 and 14 for the format J2284.

For that reason, claims 1, 2, and 12-17 would not be patentable over the cited prior art.

### ***Conclusions***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

Art Unit: 3663

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan C To whose telephone number is (571) 272-6985. The examiner can normally be reached on from 8:00AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tuan C To/

Primary Examiner of Art Unit 3663/3600

January 2, 2009

Application/Control Number: 10/822,072  
Art Unit: 3663

Page 11